D4D250-BA02-01

AC centrifugal fan

forward curved, dual inlet

with housing (flange)

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**D4D250-BA02-01**
Motor	**M4D094-LA**

Phase		3~	3~
Nominal voltage	VAC	400	400
Connection		Y	Y
Frequency	Hz	50	60
Type of data definition		fa	ml
Valid for approval / standard		CE	CE
Speed	min^{-1}	1240	1410
Power input	W	1140	1210
Current draw	A	2.1	2.2
Min. back pressure	Pa	0	250
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	60	45
Starting current	A	4.6	4

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	No
Specific ratio*	1.00

* Specific ratio = 1 + p_{fs} / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		40.4	28.9	35.9
Efficiency grade N		48.5	37	44
Power input P_e	kW	0.52		
Air flow q_v	m^3/h	2005		
Pressure increase p_{fs}	Pa	381		
Speed n	min^{-1}	1405		

Data established at point of optimum efficiency

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Technical features

Mass	17.3 kg
Size	250 mm
Material of impeller	Sendzimir galvanized sheet steel
Housing material	Sendzimir galvanized sheet steel
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 20
Insulation class	"F"
Humidity class	F0
Mounting position	Any
Operation mode	Continuous operation (S1)
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) brought out
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	CE
Approval	CCC

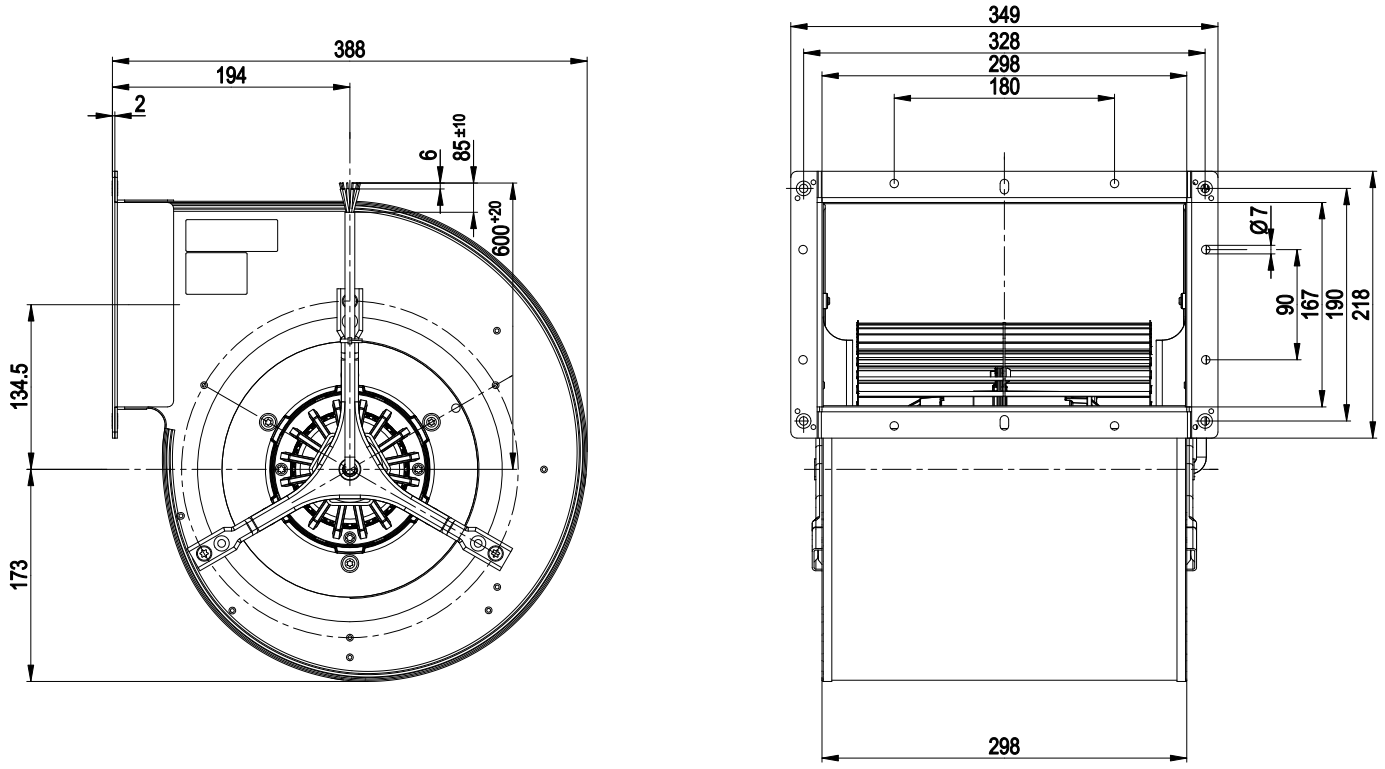
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Product drawing



1	Connection line ETFE AWG18, 6 x brass lead tips crimped

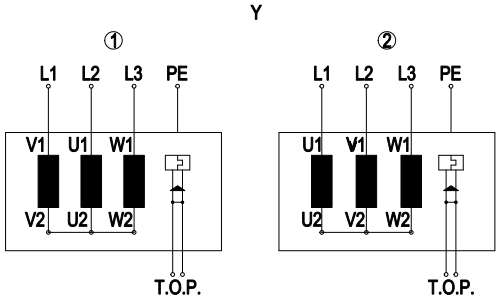
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Connection screen



Y	Star connection, three-phase motor
1	Counter-clockwise operation
L1	blue
L2	black
L3	brown
PE	green/yellow
TOP	grey
2	Clockwise operation
L1	black
L2	blue
L3	brown
PE	green/yellow
TOP	grey

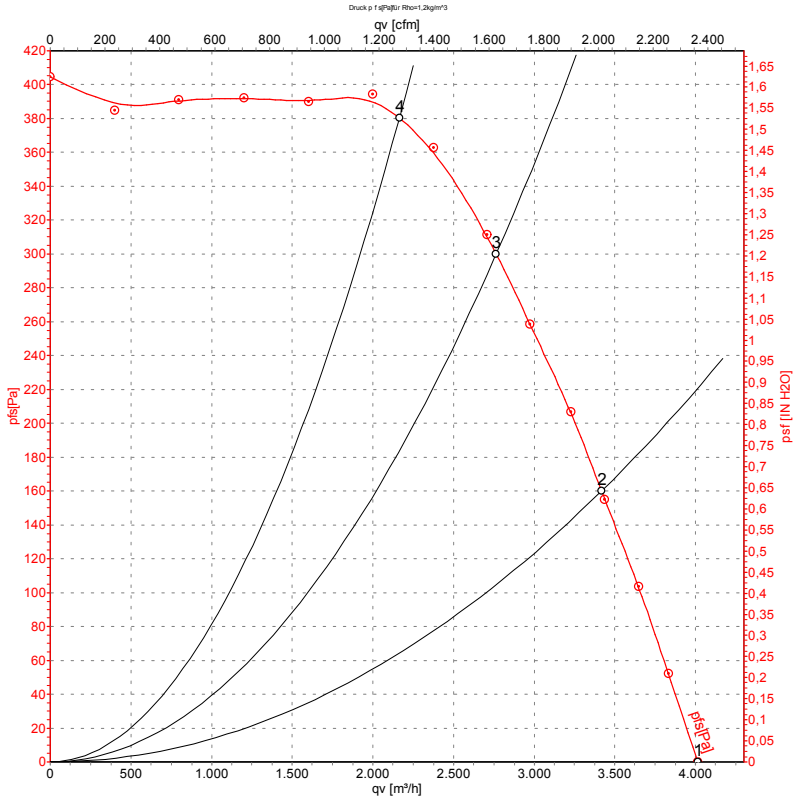
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Charts: Air flow 50 Hz Y



Measurement: LU-73522

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	Conn.	U	f	n	P_e	I	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa
1	Y	400	50	1240	1140	2.10	4015	0
2	Y	400	50	1300	920	1.78	3420	160
3	Y	400	50	1355	724	1.49	2765	300
4	Y	400	50	1395	566	1.29	2165	380

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

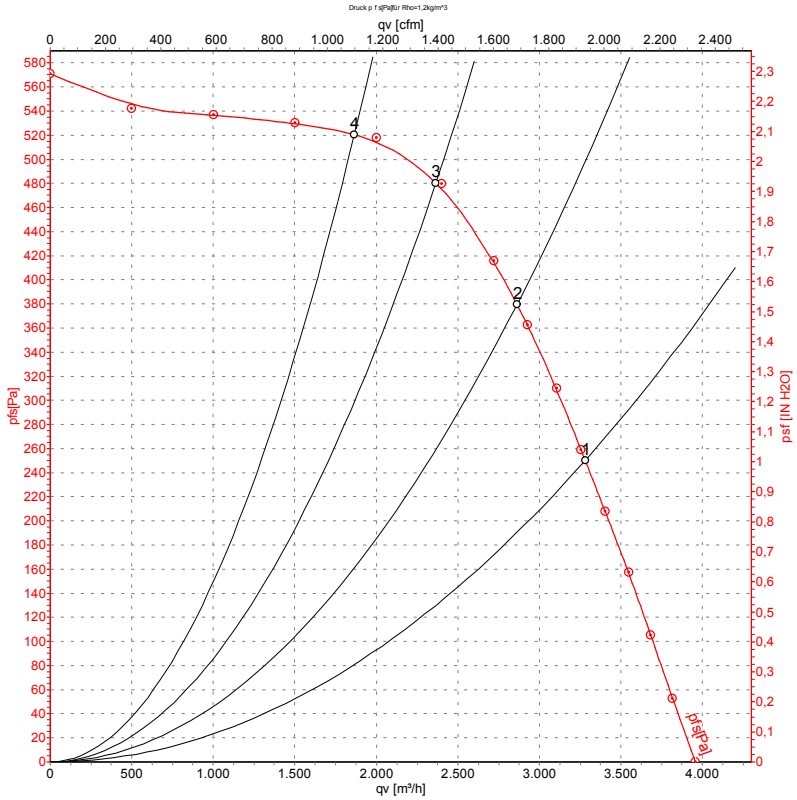
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Charts: Air flow 60 Hz



Measurement: LU-133126

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	U	f	n	P_e	I	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	400	60	1410	1210	2.20	3280	250
2	400	60	1490	1007	1.78	2865	380
3	400	60	1570	819	1.48	2365	480
4	400	60	1625	656	1.25	1865	520

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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